

U.S. Patent Application Serial No. 10/613,182
Reply to Office Action mailed January 7, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Claims 2, 3, and 6 are amended.

Claims 4-15 are withdrawn.

Claim 1 and 8-15 are canceled.

Listing of Claims:

1. (Canceled)
2. (Currently Amended) [[The]]A bipolar transistor according to claim 1, comprising:
a semiconductor substrate;
a transistor operation region formed on the semiconductor substrate;
an insulating film formed so as to cover a surface of the semiconductor substrate;
a lead line led to a surface of the insulating film therethrough from the transistor operation region;
a pad for wire bonding connected to the lead line; and
a capacitance adjustment line connected to the pad,
wherein the semiconductor substrate is an N⁺/N type collector substrate, a collector electrode is formed on a reverse surface of the collector substrate, and the pad is formed on a surface of the collector substrate as an emitter pad and a base pad.

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3. (Currently Amended) [[The]]A bipolar transistor according to claim 2, comprising:

a semiconductor substrate;

a transistor operation region formed on the semiconductor substrate;

an insulating film formed so as to cover a surface of the semiconductor substrate;

a lead line led to a surface of the insulating film therethrough from the transistor operation region;

a pad for wire bonding connected to the lead line; and

a capacitance adjustment line connected to the pad,

wherein by adjusting an area of the capacitance adjustment line connected to at least one of the base pad and the emitter pad, at least one capacitance value of a corresponding collector-base capacitor and collector-emitter capacitor is adjusted.

4. (Previously Presented) The bipolar transistor according to claim 2, wherein by adjusting lengths of lines opposed to each other of the capacitance adjustment line connected to the emitter pad and the capacitance adjustment line connected to the base pad, a capacitance value of an emitter-base capacitor is adjusted.

5. (Previously Presented) The bipolar transistor according to claim 4, wherein the capacitance adjustment line connected to the emitter pad and the capacitance adjustment line connected to the base pad are disposed in a comb shape.

6. (Currently Amended) The bipolar transistor according to claim [[1]]2, wherein the semiconductor substrate is an N⁺/N type emitter substrate, an emitter electrode is formed on a reverse surface of the emitter substrate, and the pad is formed on a surface of the emitter substrate as a collector pad and a base pad.

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7. (Previously Presented) The bipolar transistor according to claim 6, wherein the capacitance adjustment line connected to the collector pad and the capacitance adjustment line connected to the base pad, which is opposed to the capacitance adjustment line connected to the collector pad, interpose the insulating film therebetween to form a collector-base capacitor as a Metal-Insulator-Metal (MIM) type capacitor, and by adjusting an opposed area of the capacitance adjustment lines, a capacitance value of the collector-base capacitor is adjusted.

8-15. (Canceled)